



STATE OF DELAWARE  
EXECUTIVE DEPARTMENT  
OFFICE OF  
STATE PLANNING COORDINATION

August 16, 2004

Mr. Andrew Hayes  
River Basin Engineering  
724 Yorklyn Rd., Suite 300  
Hockessin, DE 19707

RE: PLUS review – PLUS 2004-07-01; Bennett's Ridge

Dear Mr. Hayes:

Thank you for meeting with State agency planners on July 28, 2004 to discuss the proposed plans for the Bennett's Ridge project to be located on SR 14, 1,000 feet west of Road 443 within the City of Milford.

According to the information received, you are seeking to rezone 99.98 acres from C-3 to R-3 for the purpose of developing a 531 residential unit subdivision with 200,673 square foot of commercial space.

Please note that changes to the plan, other than those suggested in this letter, could result in additional comments from the State. Additionally, these comments reflect only issues that are the responsibility of the agencies represented at the meeting. The developers will also need to comply with any Federal, State and local regulations regarding this property. We also note that as The City of Milford is the governing authority over this land, the developers will need to comply with any and all regulations/restrictions set forth by the City.

This office has received the following comments from State agencies:

**Office of State Planning Coordination – Contact: David Edgell 739-3090**

This project is located in Investment Level 1 according to the June 3 version of the 2004 State Strategies for Policies and Spending, which has been approved by the Cabinet Committee for State Planning Issues. This site is also located in the City of Milford. Investment Level 1 reflects areas that are already developed in an urban or suburban fashion, where infrastructure is existing or readily available, and where future

redevelopment or infill projects are expected and encouraged by State policy. This project is a mixed use project providing commercial and residential uses. **Our office supports mixed use infill projects as essential to the Livable Delaware strategy of concentrating growth in and around existing communities and infrastructure.** This is the type of project that is highly desirable to allow us to meet our goals of revitalizing our already urbanized areas while protecting agricultural lands and natural resource areas from encroachment by sprawling suburban and rural development. In order to meet these goals our office strongly recommends that the City and the developers provide pedestrian and bicycle connections to adjacent uses (include the industrial park and the near-by commercial establishments) as well as along Route 14. While there are few if any pedestrian or bicycle facilities in this part of Milford now, the construction of this development with its large residential component will create a need and justification for alternative modes of transportation. Our office has no objections to the proposed rezoning and development of this project in accordance with the relevant City codes and ordinances.

**State Historic Preservation Office (SHPO) – Contact: Anne McCleave 739-5685**

There is a medium probability for archaeological sites within the subject property, especially near the woods and stream. It is requested that the development retain the wooded areas and provide a buffer between the development and wooded areas, in order to preserve any archaeological sites.

**Department of Transportation – Contact: Bill Brockenbrough 760-2109**

A traffic impact study (TIS) is required for this project and was scoped on February 27, 2004. In DelDOT's review of the TIS, they may add to or modify the following comments. DelDOT has commended the developer for starting the TIS process early. Presently the review time for completed TIS is about 8 months.

The median proposed at the site entrance is too wide. Once on the site, the median width is at the City of Milford's discretion, but at the entrance DelDOT will permit a maximum width of 10 feet.

As they understand it, the driveways shown behind the existing developments that separate this project from Delaware Route 14 will be City of Milford streets. Those streets will afford those developments rear access. DelDOT commended the developer for providing this feature.

It is recommended that sidewalks be provided throughout the community to encourage walking.

Delaware Transit Corporation (DTC) is interested in working with this development to reserve a place for a bus stop near the proposed apartments and, more specifically, near the proposed traffic circle. DTC will work with the developer at the appropriate time to

provide the bus stop specifications information, making sure the bus stop will be accessible and meet American with Disabilities Act standards. The person to contact for bus stop specification information and costs is the Facility Coordinator for Kent County, Mr. Charlie Simpson, at (302) 760-2806.

The developer's site engineer should contact the DelDOT Subdivision Manager for Kent County, Mr. George Shaw, regarding comments 2 through 5 above and more generally about our requirements with regard to the design of the site entrance. Mr. Shaw may be reached at (302) 760-2261. DelDOT stated that Mr. Shaw is retiring at the end of August. While he will be replaced, it is recommended that the developer's site engineer document any verbal understandings that might exist regarding this project.

**The Department of Natural Resources and Environmental Control – Contact:  
Kevin Coyle 739-3091**

**Soils**

According to the soil survey update, the following soils were found in the immediate vicinity of the proposed construction and grouped on the basis of drainage class:

- Well drained – Sassafras
- Moderately well drained – Woodstown
- Poorly drained (**hydric**) – Othello
- Very poorly drained (**hydric**) –Johnston (**floodplain**)

Sassafras is a well-drained upland soil with few limitations for development. Woodstown is a moderately well-drained soil of low-lying upland that has moderate limitations for development. Othello is poorly-drained wetland associated (**hydric**) soils that has severe limitations for development. Johnston is a very poorly-drained wetland associated (**hydric**) floodplain soil that has severe limitations for development.

**Wetlands**

Statewide Wetland Mapping Project (SWMP) maps indicate the presence of palustrine forested wetlands along the riparian corridor bordering Muller Run.

Impacts to Palustrine wetlands are regulated by the Army Corps of Engineers through Section 404 of the Clean Water Act. In addition, individual 404 permits and certain Nationwide Permits from the Army Corps of Engineers also require 401 Water Quality Certification from the DNREC Wetland and Subaqueous Land Section and Coastal Zone Federal Consistency Certification from the DNREC Division of Soil and Water Conservation, Delaware Coastal Programs Section. Each of these certifications represents a separate permitting process.

Because there is strong evidence that federally regulated wetlands exist on site, **a wetland delineation, in accordance with the methodology established by the Corps of Engineers Wetlands Delineation Manual, (Technical Report Y-87-1) should be conducted. Once complete, this delineation should be verified Corps of Engineers through the Jurisdictional Determination process.**

**To find out more about permitting requirements, the applicant is encouraged to attend a Joint Permit Process Meeting.** These meetings are held monthly and are attended by federal and state resource agencies responsible for wetland permitting. Contact Denise Rawding at (302) 739-4691 to schedule a meeting.

It is also recommended that the Farm Services Agency of the USDA be contacted to assess whether the farmed wetlands on subject parcel meet the recognized criteria for classification as "prior converted wetlands." Prior converted wetlands are farmed wetlands that have drained or altered before December 23, 1985, and no longer meet the wetland criteria established under the 404 program. Such wetlands are considered exempt from regulatory protection provided that there is no proof of a continuous "fallow period" of five years or greater in that parcel's cropping history. Parcels converted after said date regardless of cropping history are considered jurisdictional by the Army Corps of Engineers (ACOE). The contact person for assessing a parcel's cropping history is Sally Griffin at the USDA – she can be reached at 678-4182.

Vegetated buffers of no less than 100 feet should be employed from the edge of the wetland complex. Lots should be removed in their entirety from both the wetland and the forest surrounding it. The developer and County should note that both DNREC and Army Corps of Engineers discourage allowing lot lines to contain wetlands to minimize potential cumulative impacts resulting from unauthorized and/or illegal activities and disturbances that can be caused by homeowners.

## **TMDLs**

Although Total Maximum Daily Loads (TMDLs) as a "pollution runoff mitigation strategy" to reduce nutrient loading have not yet been developed for most of the tributaries or subwatersheds of the Delaware Bay watershed to date, work is continuing on their development. TMDLs for the Mispillion watershed, of which this parcel is part, are scheduled for completion in December 2006.

Therefore, until the specified TMDL reductions and pollution control strategies are adopted, it shall be incumbent upon the developer to employ best available technologies (BATs) and/or best management practices (BMPs) as "methodological mitigative strategies" to reduce degradative impacts associated with development.

## **Water Supply**

Should dewatering points be needed during any phase of construction, a dewatering well construction permit must be obtained from the Water Supply Section prior to construction of the well points. In addition, a water allocation permit will be needed if the pumping rate will exceed 50,000 gallons per day at any time during operation.

All well permit applications must be prepared and signed by licensed water well contractors, and only licensed well drillers may construct the wells. Please factor in the necessary time for processing the well permit applications into the construction schedule. Dewatering well permit applications typically take approximately four weeks to process, which allows the necessary time for technical review and advertising.

Should you have any questions concerning these comments, please contact Rick Rios at 302-739-3665.

## **Stormwater Management**

**Source:** Delaware Sediment and Stormwater Regulations

### **Requirements:**

1. Land disturbing activities in excess of 5,000 square feet are regulated under the Delaware Sediment and Stormwater Regulations. A detailed sediment and stormwater management plan must be reviewed and approved by our office prior to any land disturbing activity (i.e. clearing, grubbing, filling, grading, etc.) taking place.
2. The review fee and a completed Application for a Detailed Plan are due at the time of plan submittal to our office. Construction inspection fees based on developed area and stormwater facility maintenance inspection fees based on the number of stormwater facilities. Please refer to the fee schedule for those amounts.
3. The following notes must appear on the record plan:
  - The Kent Conservation District reserves the right to enter private property for purposes of periodic site inspection.
  - The Kent Conservation District reserves the right to add, modify, or delete any erosion or sediment control measure, as it deems necessary.
  - A clear statement of defined maintenance responsibility for stormwater management facilities must be provided on the Record Plan.
4. Ease of maintenance must be considered as a site design component and a maintenance set aside area for disposal of sediments removed from the basins during the course of regular maintenance must be shown on the Record Plan for the subdivision.
5. All drainage ways and storm drain should be contained within drainage easements and clearly shown on the plan to be recorded by Kent County.
6. A soils investigation supporting the stormwater management facility design is

required to determine impacts of the seasonal high groundwater level and soils for any basin design.

**Comments:**

1. The site has a shallow outfall along Route 14. This may force the proposed the stormwater facility to become shallow in storage volume and increase the footprint of the ponds. The developer is encouraged to explore the possibility of improving and deepening the outfall across the property to the south.
2. Wet stormwater ponds are required to provide a depth of at least 3 feet across 50% of the permanent pool area. The northern stormwater facility should be checked to verify it can meet this requirement.
3. If the commercial and residential portions of the project are to be separate entities, a drainage/maintenance agreement between the two would be needed if they share stormwater facilities.
4. The preferred methods of stormwater management are those practices that maximize the use of the natural features of a site, promote recharge and minimize the reliance on structural components. The designer is encouraged to consider the conservation design approach and limit the amount of tree clearing required for the development of the site including the stormwater management facilities shown in the wooded areas.
5. Access to the proposed stormwater facility must be provided for periodic maintenance. This access should be at least 12 feet wide to leading to the facility and around the facility's perimeter.
6. It is recommended that the stormwater management areas be incorporated into the overall landscape plan to enhance water quality and to make the stormwater facility an attractive community amenity.
7. A letter of no objection to recordation will be provided once the detailed Sediment and Stormwater Management plan has been approved.
8. Proper drainage of developed lots and active open space should be considered in the development of the grading plan for this subdivision.
9. Based on the site characteristics, a pre-application meeting is suggested to discuss stormwater management and drainage for this site.

**Drainage**

The Drainage Section does not have any knowledge of existing drainage complaints or concerns associated with the project. The Drainage Section does ask that all precautions be taken to ensure the project does not hinder any off site drainage upstream of the project or create any off site drainage problems downstream by the release of on site storm water.

## **Forests**

Site plans show impacts to the forested area in the eastern corner of the project site. Impacts to this area will cause “fragmentation” of the larger forest, resulting in a significant decrease in habitat value. The developer is strongly encouraged to preserve, and where possible, enhance forested resources on site.

Any lands set aside for conservation purposes should be placed into a permanent conservation easement or other binding protection mechanism. These areas should be clearly marked and delineated so that residents understand their importance and so that homeowner activities do not infringe upon these areas.

## **Revegetation**

For this project, we request that no invasive species be used in the revegetation of disturbed areas. A list of species considered invasive in Delaware can be found on the DNHP web site, <[www.dnrec.state.de.us/fw/invasive.htm](http://www.dnrec.state.de.us/fw/invasive.htm)>. It is further recommended that you native plants and the DNREC Botanist, Bill McAvoy can be contacted at (302) 653-2880 to assist you in developing a plant list.

## **Nuisance Species**

The large pond within the project area will likely attract waterfowl like resident Canada geese and mute swans that will create a nuisance for community residents. Although small numbers of these species are enjoyed by residents, geese and swans can quickly multiply and overwhelm the area. High concentrations of waterfowl in ponds create water-quality problems, leave droppings on lawn and paved areas and can become aggressive during the nesting season. The pond should be landscaped to deter nuisance species. Short manicured lawns around ponds provide an attractive habitat for these species. However, native plantings, including tall grasses, wildflowers, shrubs, and trees at the edge and within a buffer area around ponds, are not as attractive to geese because they do not feel as safe from predators and other disturbance when their view of the area is blocked. The Division of Fish and Wildlife does not provide goose control services, and if problems arise, residents or the home-owners association will have to accept the burden of dealing with these species (e.g., permit applications, costs, securing services of certified wildlife professionals). Solutions can be costly and labor intensive; however, with the proper landscaping, monitoring, and other techniques, geese problems can be minimized.

## **Recreation**

It is recommended that sidewalks be built fronting every residence and stub streets. A complete system of sidewalks will: 1) fulfill the recreation need for walking and biking facilities 2) provide opportunities for neighbors to interact in the community and 3) facilitate safe, convenient off-road access to neighboring communities, public mass

transit stops, schools, stores, work etc. It is not clear how the resident pedestrian and bicyclists will access or travel safely around the commercial center of this project.

DNREC sees the potential for a trail system and recommends that a series of stacking trail loops be designed with access points in each subdivision "pod" and connections to adjacent communities. Community trail systems with long continuous trails, perimeter-only trails, and systems with few access points, often go unused and neglected. For trail design/construction specifications, contact Susan Moerschel at (302) 739-5285.

It is encourages that the designer/builder involve the Milford Parks and Recreation Department in the recreation components of this project. Mary Betts can be reached at (302) 422-1104.

### **Open Space**

In areas set aside for passive open space, the developer is encouraged to consider establishment of additional forested areas or meadow-type grasses. Once established, these ecosystems provide increased water infiltration into groundwater, decreased run-off into surface water, air quality improvements, and require much less maintenance than traditional turf grass, an important consideration if a homeowners association will take over responsibility for maintenance of community open spaces.

Open space containing forest and/or wetlands should be placed into a permanent conservation easement or other permanent protection mechanism. Conservation areas should also be demarked to avoid infringement by homeowners.

### **Air Quality**

***Note: Comments for the air emission impacts of the 531 residential units (278 apartments and 253 town homes)***

Air pollution threatens the health of human beings and other living things on our planet. While often invisible, pollutants in the air create smog and acid rain, cause cancer or other serious health effects, diminish the protective ozone layer in the upper atmosphere, and contribute to the potential for world climate change. Breathing polluted air can have numerous effects on human health, including respiratory problems, hospitalization for heart or lung disease, and even premature death. Some can also have effects on aquatic life, vegetation, and animals.

Once complete, vehicle emissions associated with this project will be 40.8 tons (81,503 pounds) per year of VOC (volatile organic compounds), 33.7 tons (67,478.9 pounds) per year of NOx (nitrogen oxides), 24.9 tons (49,787.2 pounds) per year of SO2 (sulfur dioxide), 2.2 ton (4,431.9 pounds) per year of fine particulates and 3,408.8 tons (~ 6.8 million pounds) per year of CO2 (carbon dioxide)



Emissions from electrical power generation associated with this project will be 6.5 tons (13,028.8 pounds) per year of NO<sub>x</sub> (nitrogen oxides), 22.7 tons (45,317.7 pounds) per year of SO<sub>2</sub> (sulfur dioxide) and 3,342.2 tons (~ 6.7 million pounds) per year of CO<sub>2</sub> (carbon dioxide).

Emissions from area sources\* associated with this project will be 16.4 tons (32,873.8 pounds) per year of VOC (volatile organic compounds), 1.8 tons (3,617.1 pounds) per year of NO<sub>x</sub> (nitrogen oxides), 1.5 tons (3,001.7 pounds) per year of SO<sub>2</sub> (sulfur dioxide), 1.9 ton (3,873.5 pounds) per year of fine particulates and 66.6 tons (133,263.2 pounds) per year of CO<sub>2</sub> (carbon dioxide)

	VOC	NO <sub>x</sub>	SO <sub>2</sub>	PM <sub>2.5</sub>	CO <sub>2</sub>
Mobile	40.8	33.7	24.9	2.2	3408.8
Residential	16.4	1.8	1.5	1.9	66.6
Electrical Power		6.5	22.7		3342.2
TOTAL	57.2	42.0	49.1	4.1	6817.6

The Department of Natural Resources and Environmental Control is asking that local jurisdictions consider mitigation to help resolve this issue. Mitigation might involve limiting large new developments to growth zones, focusing development to urban areas capable of providing mass transit services, requiring more energy efficient homes which would lessen air quality impacts, and promoting walkability and bikability within and between developments and town centers.

With that said this State notes that this proposed development is within the City of Milford and within a growth area. Therefore, the State would ask that you consider the development of energy efficient homes and interconnectivity with the Town and surrounding commercial areas to promote walkability and bikeability.

### **Underground Storage Tanks**

There are five inactive LUST sites located near the proposed project:

B & C Equipment, Inc., Facility # 1-000007, Project # K9402059

Diamond State Telephone Milford, Facility # 1-000253, Project # K9212276

E.D.Supply Co., Facility # 1-000306, Project # K9108163

Express 24, Facility # 1-000405, Project # K9710160

NKS Distributors, Facility # 1-000467, Project # K9303053

No environmental Impact is expected from the above inactive/active LUST site(s). However, should any underground storage tank or petroleum contaminated soil be discovered during construction, the Tank Management Branch must be notified as soon as possible. It is not anticipated that any construction specifications would be need to be changed due to petroleum contamination. However, should any unanticipated

contamination be encountered and PVC pipe is being utilized, it will need to be changed to ductile steel in the contaminated areas.

**State Fire Marshal's Office – Contact: Kevin McSweeney 739-3696**

These comments are intended for informational use only and do not constitute any type of approval from the Delaware State Fire Marshal's Office. At the time of formal submittal, the applicant shall provide; completed application, fee, and three sets of plans depicting the following in accordance with the Delaware State Fire Prevention Regulation (DSFPR):

a. **Fire Protection Water Requirements:**

- Water distribution system capable of delivering at least 1500 gpm for 2-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Mercantile)
- Water distribution system capable of delivering at least 1000 gpm for 1-hour duration, at 20-psi residual pressure is required. Fire hydrants with 800 feet spacing on centers. (Assembly, Apartment, Hotel and Townhouses)
- Where a water distribution system is proposed for the site, the infrastructure for fire protection water shall be provided, including the size of water mains for fire hydrants and sprinkler systems.

b. **Fire Protection Features:**

- All structures over 10,000 Sq. Ft. aggregate will require automatic sprinkler protection installed.
- Buildings greater than 10,000 sq.ft., 3-stories or more or over 35 feet, or classified as High Hazard, are required to meet fire lane marking requirements.
- Show Fire Department Connection location (Must be within 300 feet of fire hydrant), and detail as shown in the DSFPR.
- Show Fire Lanes and Sign Detail as shown in DSFPR
- For townhouse buildings, provide a section / detail and the UL design number of the 2-hour fire rated separation wall on the Site plan.

c. **Accessibility**

- All premises which the fire department may be called upon to protect in case of fire, and which are not readily accessible from public roads, shall be provided with suitable gates and access roads, and fire lanes so that all buildings on the premises are accessible to fire apparatus. This means that the access road to the subdivision from Milford Harrington Hwy must be constructed so fire department apparatus may negotiate it.
- Fire department access shall be provided in such a manner so that fire apparatus will be able to locate within 100 ft. of the front door.

- Any dead end road more than 300 feet in length shall be provided with a turn-around or cul-de-sac arranged such that fire apparatus will be able to turn around by making not more than one backing maneuver. The minimum paved radius of the cul-de-sac shall be 38 feet. The dimensions of the cul-de-sac or turn-around shall be shown on the final plans. Also, please be advised that parking is prohibited in the cul-de-sac or turn around.
  - If the use of speed bumps or other methods of traffic speed reduction must be in accordance with Department of Transportation requirements.
- d. **Gas Piping and System Information:**
- Provide type of fuel proposed, and show locations of bulk containers on plan.
- e. **Required Notes:**
- Provide a note on the final plans submitted for review to read “ All fire lanes, fire hydrants, and fire department connections shall be marked in accordance with the Delaware State Fire Prevention Regulations”
  - Proposed Use
  - Alpha or Numerical Labels for each building/unit for sites with multiple buildings/units
  - Square footage of each structure (Total of all Floors)
  - National Fire Protection Association (NFPA) Construction Type
  - Maximum Height of Buildings (including number of stories)
  - Townhouse 2-hr separation wall details shall be shown on site plans
  - Note indicating if building is to be sprinklered
  - Name of Water Provider
  - Letter from Water Provider approving the system layout
  - Provide Lock Box Note (as detailed in DSFPR) if Building is to be sprinklered
  - Provide Road Names, even for County Roads

Preliminary meetings with fire protection specialists are encouraged prior to formal submittal. Please call for appointment. Applications and brochures can be downloaded from our website: [www.delawarestatefiremarshal.com](http://www.delawarestatefiremarshal.com), technical services link, plan review, applications or brochures.

**Department of Agriculture - Contact: Mark Davis 739-4811**

A forested buffer should be maintained for those pre-existing residential properties and along all streams, wetlands, and river that border the proposed subdivision.

The developer should consider a diverse landscape plan that uses Delaware native tree and shrub species and encourages the “Right Tree for the Right Place” concept.

**Public Service Commission - Contact: Andrea Maucher 739-4247**

This project lies within the City of Milford CPCN area.

Any expansion of natural gas or installation of a closed propane system must fall within Pipeline Safety guidelines. Contact Malak Michael at 302-739-4247 with questions.

Recent legislation (Senate Bill 99) placed non-governmental companies providing wastewater services to 50 or more customers (in the aggregate) under the regulatory control of the PSC. While rules are not yet in place, governmental agencies offering wastewater services must file data with the Commission regarding its service areas. Contact: Kevin Neilson at (302) 739-4247.

**Delaware State Housing Authority – Contact Karen Horton 739-4263**

This proposal is to rezone 100 acres for the purpose of building 278 multi-family units (including 186 rental units), 253 town homes and 200,673 square feet of commercial space. The applicant indicated that some of the units will be targeted for first-time homebuyers and that the rental units will be affordable to moderate-income households. The DSHA supports this proposal because the provision of these units will help meet the need for both affordable homeownership and rental opportunities that were identified in the 2003 Statewide Housing Needs Assessment.

**Delaware Emergency Management Agency Contact: Don Knox 659-3362**

A significant impact to public safety is foreseen by implementation of this project due to the number of units proposed. The developer should notify the police, fire service, and emergency medical response organization serving the City of Milford, to keep them apprised of all development activities. Routes 14 and 113 are both coastal storm evacuation routes and this development will add to the traffic volume on these routes during a coastal storm event.

**Department of Education Contact: Nick Vacirca 739-4658**

531 houses could generate an estimated 266 additional students for the Milford School District.

Sussex County does not have school concurrence legislation at this time. It is recommended that the developer submit a package to the school district for informational purposes.

If the development is approved and build, please use the following information for school transportation planning. If there are homes more than 1/2 mile from the nearest public road (outside the development), developers should plan wide enough streets so that large

school buses can access and turn around (without backing) from the furthest areas within the development while picking up and dropping off students. Should there not be any sites more than 1/2 mile from the nearest public road, provisions for appropriate pick-up and drop-off at the development entrance should be included. The developer should work closely with the school district transportation supervisor.

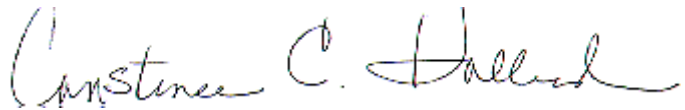
**Delaware Economic Development Office – Contact: Dorrie Moore 739-4271**

The Delaware Economic Development Office has noted concern regarding the rezoning of 100 acres from C-3 to R-3 zoning. DEDO feels that business opportunities will be lost and perhaps some thought or consideration should be given to a property swap where a C-3 zoning would be available for business locations.

Following receipt of this letter and upon filing of an application with the local jurisdiction, the applicant shall provide to the local jurisdiction and the Office of State Planning Coordination a written response to comments received as a result of the pre-application process, noting whether comments were incorporated into the project design or not and the reason therefore.

Thank you for the opportunity to review this project. If you have any questions, please contact me at 302-739-3090.

Sincerely,

A handwritten signature in dark ink, appearing to read "Constance C. Holland". The signature is fluid and cursive, with the first name "Constance" being more prominent.

Constance C. Holland, AICP  
Director

CC: City of Milford  
Sussex County